REMARKS

Claims 19-22, 26, 33-35 and 39-45 are pending in the instant application. Claims 23-25, 27-32 and 36-38 are canceled. Reconsideration of the currently pending claims in light of the comments presented below is respectfully requested.

35 U.S.C. § 112, Second Paragraph

Claims 25 and 27-31 stand rejected under § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In light of the amendments presented above, Applicants respectfully request withdrawal of each of the rejection under 35 U.S.C. § 112, second paragraph.

35 U.S.C. § 102(e)

Claims 19-31 and 33-40 stand rejected under 102(e) as anticipated by Kayyem et al., U.S. Patent No. 6,096,273 ("Kayyem"). In particular, the Examiner asserts that Kayyem teaches nucleic acids attached to electrodes via insulators, as is currently claimed in the instant application. The Examiner bases her contention on the following statement found at column 24, lines 59-61:

The passivation agents are generally attached to the electrode in the same manner as the conductive oligomer and may use the same "A" linker as defined above.

The "A" linker is defined at Column 21, lines 29-35:

In this embodiment, A is a linker or an atom. The choice of "A" will depend in part on the characteristics of the electrode. Thus, for example, A may be a sulfur moiety when a gold electrode is used. Alternatively, when metal oxide electrodes are used, A may be a silicon (silane) moiety attached to the oxygen of the oxide (see for example Chen et al., Langmuir 10:3332-3337 (1994).

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Accordingly, "A" is merely the atom, or atoms, used to attach either a conductive polymer or a passivation agent to an electrode.

For an anticipation rejection under 35 U.S.C. §102(e) to be proper, a single reference must expressly or inherently disclose each and every element of a claim. *In re Paulsen*, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994); MPEP § 2131 (citing *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As pointed out above, the Examiner has only shown that conductive oligomers and passivation agents may be attached to electrodes in the same manner. The Examiner *has not* pointed to any disclosure in Kayyem that teaches nucleic acids attached to electrodes via insulators. Accordingly, the Examiner has not carried her burden under §102(e), and therefore Applicants respectfully reiterate their request for withdrawal of the rejection.

Double Patenting

U.S. Patent No. 6,096,273

Claims 19-31 and 33-40 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-34 of U.S. Patent 6,096,273. Applicants respectfully traverse the propriety of the rejection. In particular, the Examiner's position appears to be that since the claimed compositions utilize the phrase "comprising", the Examiner is therefore able to go through the specification and find additional components that would render the claimed compositions as "obvious variations" over the '229 patent. This is incorrect. All of the claims in the '229 patent are drawn to the use of conductive oligomers to attach nucleic acids to the electrodes. The present claims are directed to the use of insulators for attachment of the nucleic acids to

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the electrodes. An "insulator" is not an obvious variation over a "conductive oligomer". Accordingly, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the claimed composition to achieve the instant invention. Thus, Applicants respectfully request withdrawal of the instant rejection.

U.S. Patent No. 6,248,229

Claims 19-31 and 33-40 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 11-21 of U.S. Patent 6,248,229. Applicants again respectfully traverse the propriety of this rejection, however in the interest of expediting prosecution, and since the '229 patent and the present application share the same priority date, a terminal disclaimer listing U.S. Patent No. 6,248,229 is submitted herewith. Accordingly, Applicant respectfully requests withdrawal of the double patenting rejection based on U.S. Patent No. 6,248,229.

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CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and early notification to that effect is respectfully requested. Please direct any calls in connection with this application to the undersigned attorney at (415) 781-1989.

Respectfully submitted,

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1/04 Dated:

By:

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